INFORMATION PAPER

L60/C4 30 July 2004

SUBJECT: Software Process Improvement

To become the Hub of the Logistic Systems through Software Process Improvement (SPI)

FACTS:

1. <u>Balanced Scorecard Goal/Objective</u>. (Which BSC goal/objective does this strategic initiative support? How so?)

The BSC goal is to Provide Integrated Logistics Picture. The objective is to bring discipline to the practices of software development and maintenance by dramatically improving the quality, predictability, cycle time, processes, and cost for all Logistics Automated Information Systems (AIS) Software. This will enhance the Information Technology (IT) link into the Integrated Logistics picture.

2. Project Description. (What is the nature of the initiative being worked?)

The SPI initiative is to improve the C4's, Legacy Application Division (LAD), software development and maintenance procedures and processes. Through these process improvement efforts, LAD will attain Level 2 Certification of the Software Engineering Institute's (SEI) Capability Maturity Model® Integrated (CMMI); therefore making significant gains in quality and productivity.

3. <u>Why Required.</u> (What performance gap is closed, new logistics capability introduced, business process improved or better business practice incorporated? Are the benefits to LOGCOM... to the USMC?)

The C4 must strive to improve our software process through sustained and disciplined efforts. The SPI initiative will raise LOGCOM C4's LAD competency to a higher maturity level in accordance with the SEI CMMI. As a result, the organization will be able to seize new business opportunities at a reduced business cost, institutionalize continual SPI efforts within the C4 organization, and remain competitive in support of the War Fighter.

4. Resources. (Is the initiative already POM'd for? How much per year? If not in the POM has a budget been developed? How much per fiscal year? Has an IPT already been established? Is there an estimate of the number of man-hours required? If so, how many per fiscal year?)

This initiative is currently not being POM'd. C4 is using organic resources and O&M funds. A full time staffed Software Engineering Process Group (SEPG) has been formed and will be working closely with two part-time SEPG members, Technical Working Groups (consisting primarily of practitioners) and a Management Steering Committee (consisting primarily of managers) to actively pursue and attain Level 2 (repeatable processes) of the CMMI model. The full time members of the SEPG are also available for corporate workgroups addressing software development issues associated with Balanced Scorecard efforts.

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- **5.** <u>Plan of Action and Milestones.</u> (What are the start and end dates. What are the interim high level actions and milestones?)
- A.) Below are the High Level Actions and Milestones:

High Level Actions and Milestones	Begin Date	End Date
Form SEPG	JUL 2004	
Implement SPI Program		
Organizational Issues		
CMMI Modules		
Requirements Management		
Project Planning		
Project Monitoring and Control		
Configuration Management		
Quality Assurance		
Supplier Agreement		
Measurement Analysis		
Mini Assessment		
Develop SPI Policy		
Formal Appraisal		SEP 2005

B.) Below are the Measurements:

CMMI measures are used to determine the status of the related software processes. These measurements support the achievement of the organization's business goals.

CMMI Level 2 measures are planned versus actual size, effort, cost, and schedule, which include the number of changes and the number of nonconformances in product and processes.

Also mini assessments (audits) will provide a periodic process assessment of the model based process improvement initiative. These assessments will be performed to measure progress in achieving the organization's goal of attaining Level 2 maturity of the CMMI. Also, at the end of the project, a formal appraisal will be done by a SEI trained and authorized lead assessor to evaluate the organization's process maturity level relative to CMMI standards.

6. <u>Owning Organization/ Partners</u>. (Under which organization's cognizance does this strategic initiative fall? What other organizations are involved in this strategic initiative? How so?)

This initiative is consistent with C4's function to integrate the Command's information systems with those of the Department of Defense, Marine Corps and other governmental agencies by becoming the hub for Logistics IT Systems.

7. <u>Point of Contact</u>. (Project Lead, telephone number and email address)

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